SEP 2002

GENERAL

1. References
   a. AR 385-40, Accident Reporting and records, dated 01 Nov 1994, with USACE Supplement 1 to AR 385-40 dated 30 Mar 1990.
   b. EP 385-1-10 Safety and Occupational Health Boards of Investigation, dated 31 May 1991.
   c. Memorandum for Distribution, CEPOA-DE, Subject: Appointment Order of Board of Investigation for Alaska Engineer District (POA), 05 August 2002 (See Appendix A.)

2. Board of Investigation

   a. In accordance with the above-cited references, the Alaska District Commander on 05 August 2002 established a board of investigation to gather and evaluate information to determine the cause of a serious injury to a contractor employee occurring at a housing construction project located on Fort Wainwright, AK, and make recommendations for the prevention of future occurrences. The following appointments were made:
      - Board President - Dennis W. Mitchell, CSP, Chief, Construction Support Branch.
      - Board Member – Richard A. Hancock, P.E., Program/Project Manager, Medical Facilities.
      - Board Member - Glendon L. Heard, P.E., Deputy Chief, Engineering Division
      - Technical Advisor: Gregory E. Vernon, MS, Safety and Occupational Health Specialist.

   b. On Monday, 05 August 2002, at approximately 0915, a contractor employed carpenter was found in the basement of a wood-framed 2-story 4-plex housing unit seriously injured from an apparent fall. The area of impact was directly below openings in the second and first decks that would later accommodate installation of stairways. The building was under construction by Osborne Construction Company on Corps Design/Build Contract No. DACA85-01-C-0026, FY01 Replacement Family Housing, Ft. Wainwright, AK.

   c. The board convened at approximately 1000 on 06 Aug 2002 at the Northern Area Office on Ft. Wainwright. With the assistance of the technical advisor, the board completed pre-investigational briefings including an in-brief with select Area and Resident Office personnel. Area Office personnel provided the board with background information on the accident which included the contractor prepared POD Form 265-R, Immediate Report of Accident (Appendix B) and a Draft ENG Form 3394, USACE Accident Investigation Report. Verbal reports and photographs of the accident site were received

from Corps personnel who first responded to the accident. These personnel had assured that the victim was receiving medical treatment and the site was secured from disturbance. Selected photographs are included in this report (Appendix C).

d. Board members visited the accident site from approximately 1400 through 1630, 06 August 2002, accompanied by the Industrial Hygienist from the Northern Area Office. A second site visit was performed on 7 August between approximately 0930 and 1130. A subsequent meeting was held on 7 August from 1530 – 1630 with the contractor's Project Manager and Corporate Safety Officer. A physical inspection and documentation of the site was performed. Various contractor witnesses were interviewed. These included the following;
    - Site Superintendent
    - Framing Foreman
    - Journeyman Framing Carpenter
    - Concrete Foreman
    - CQC System Manager
    - Asst. CQC System Manager
    - Several additional site personnel who were present at the time of the accident.

e. Various Government personnel were also interviewed. None were on site at the time of the accident. Both the Resident Engineer and the regular Quality Assurance representative were on approved leave at the time. The Quality Assurance representative assigned to temporarily cover this job was at another of his assigned jobsites.

DESCRIPTION

On Monday 05 August, 2002, the workday started at the normal time of 0700 with carpenters installing exterior wall framing for the second floor of Building No. 1410. This was the fourth in a series of similar buildings being constructed. Weather conditions were 40-degrees F with winds of 6-mph and scattered clouds. Visibility was 2-miles in smoke from distant wildfires.

A crew consisting of several experienced carpenters was erecting exterior wall partitions on the western half of the second floor deck of the 2-story building and snapping chalk lines working from west to east. Fall protection anchors, which would interfere with wall construction, were also being removed. One of the carpenters (later identified as the injured employee) was seen heading east on the second floor deck at approximately 0745 wearing his harness and a 6' shock-absorbing lanyard, but without his arrestor cable mechanism or means for attaching to the anchor system. No one reported bringing this to the attention of the subsequently injured employee or others.

At approximately 0815, it was noticed that this worker was missing. Co-workers briefly looked for the missing man. They were not really concerned and assumed he was on break or elsewhere. The missing worker was a 34-year old male, reported to have approximately 15 years of carpentry experience. He had begun work for the contractor on this project on 24 July 2002, and had received fall protection training on his first day of work. (See Appendix D.) He was reportedly proficient at the work and diligent on safety.

At approximately 0915 a worker sweeping the eastern end of the second floor deck found the missing worker lying injured 18.5 feet below on the concrete basement floor of the easternmost unit. The injured employee was directly below 6.5-foot by 9.5-foot openings in the 1st and 2nd floor decks in which stairs/stairwells would later be constructed. No one reported seeing the actual fall. A diagram of the accident site is shown in Figure 1.

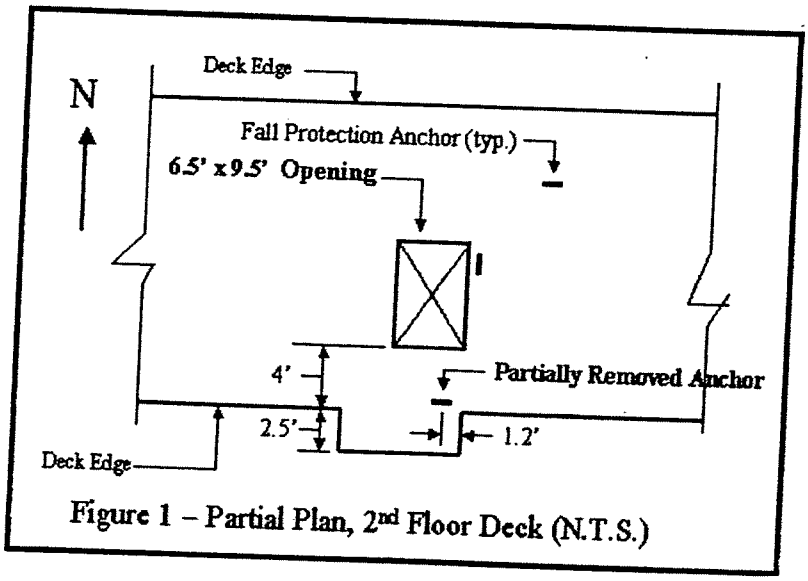


Figure 1 – Partial Plan, 2nd Floor Deck (N.T.S.)

The worker who found the injured employee called for help. The contractor's on-site superintendent was immediately notified of the accident by radio. First aid trained workers, including one with EMT training, responded to the emergency and provided first aid. Crews began positioning the on-site crane to extract the victim from the basement. The Fort Wainwright Fire Department was contacted at 0919, arrived on site at 0924, and extracted the subject. When found, the injured employee was wearing a harness and 6' shock-absorbing lanyard. The lanyard had not been deployed (yanked).

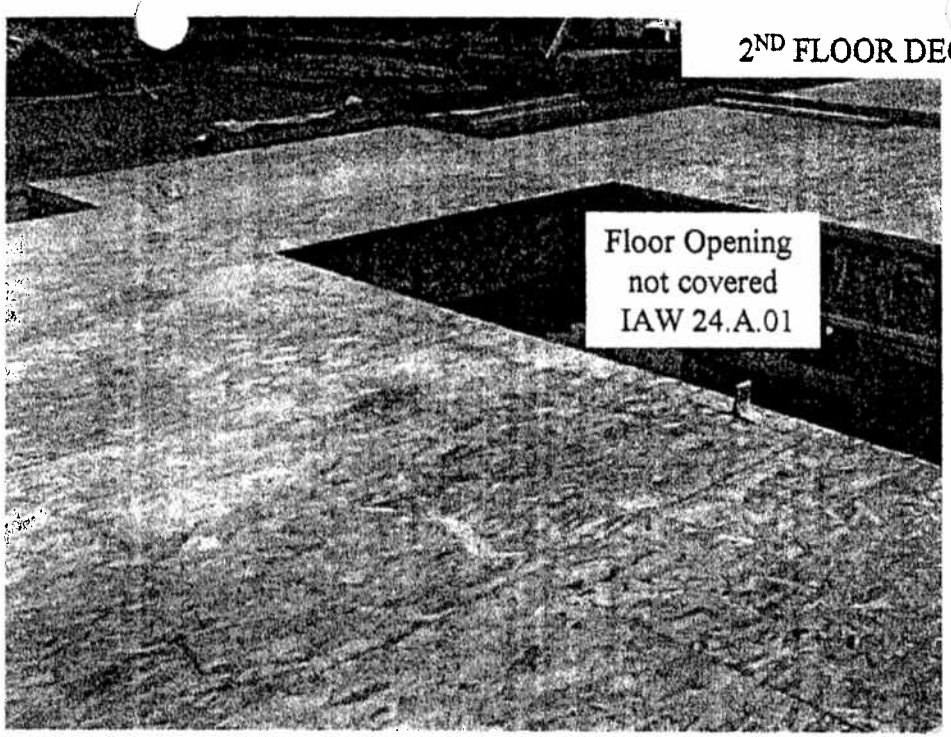
The harness and lanyard were cut off during the rescue. The subject was transported to Fairbanks Memorial Hospital. He was subsequently transported to Providence Hospital, Anchorage, AK. Initial medical evaluation indicated that the victim was in critical condition with traumatic injuries to his spine and head. The spinal injury may result in permanent paralysis. The Fire Department log is included as Appendix E.

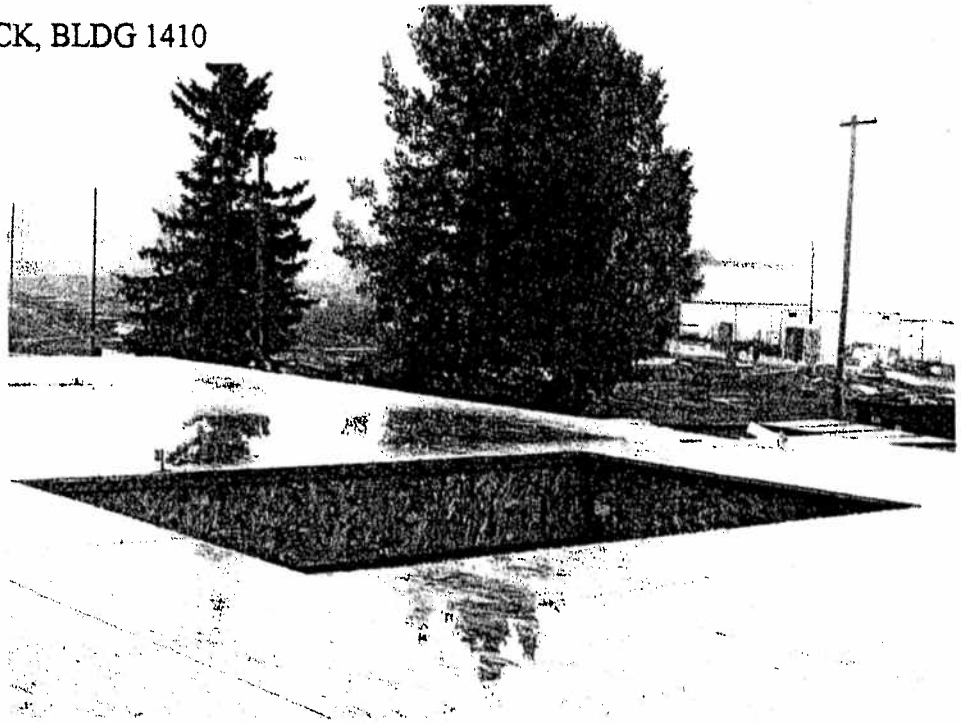
The contractor reported the accident to the Industrial Hygienist (IH) at the Corps Area Office at approximately 1000. The IH reported the incident to the District Safety Office at approximately 1015. At the same time, the Chief of Construction/Operations Division was notified by Area Office personnel and upward reported this information to the Deputy District Engineer. Safety Office personnel subsequently provided additional upward reporting.

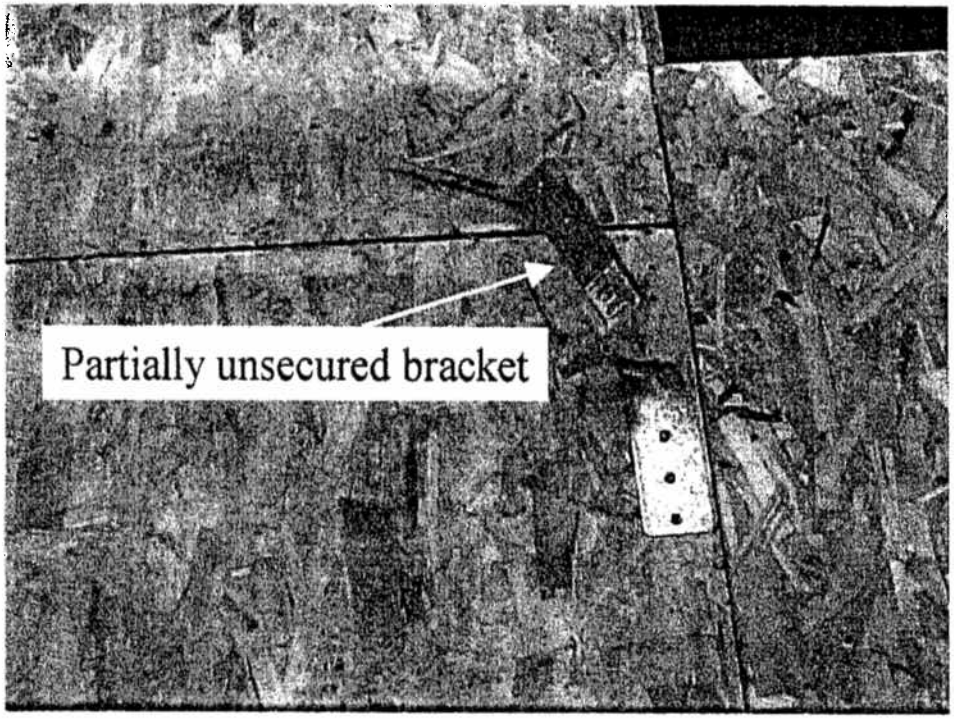
↑ OK

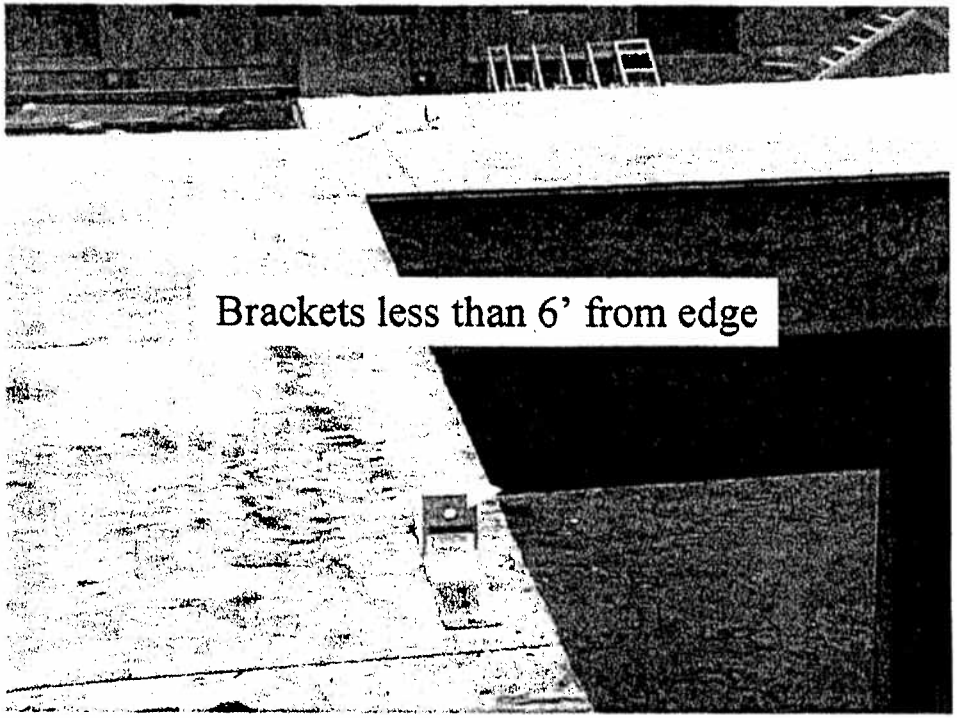
↓ NO

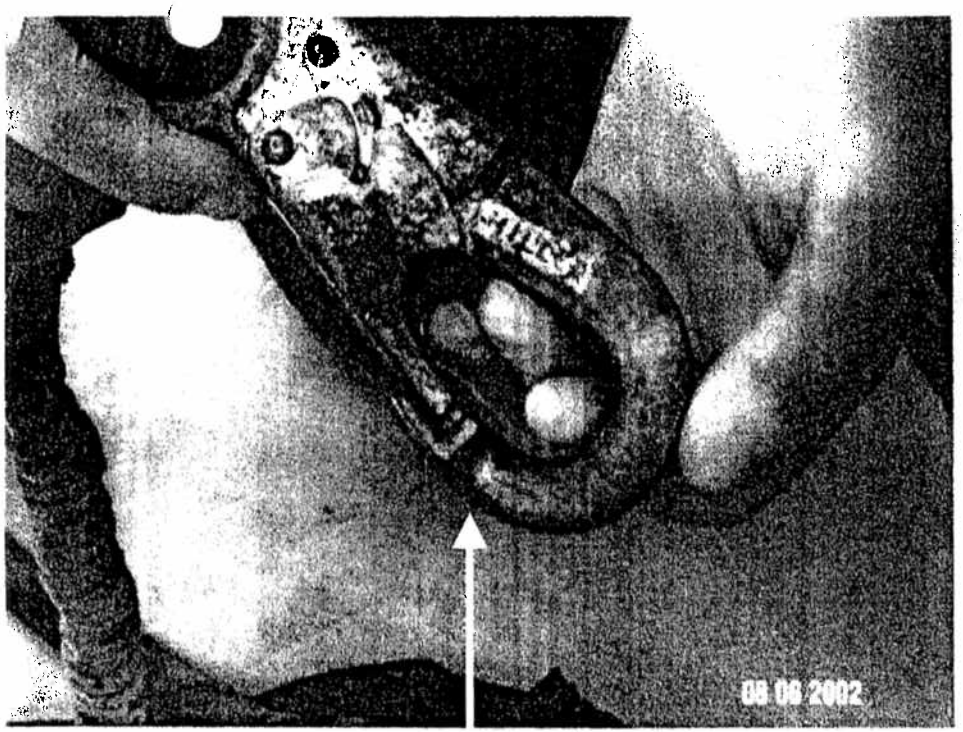
2ND FLOOR DECK, BLDG 1410



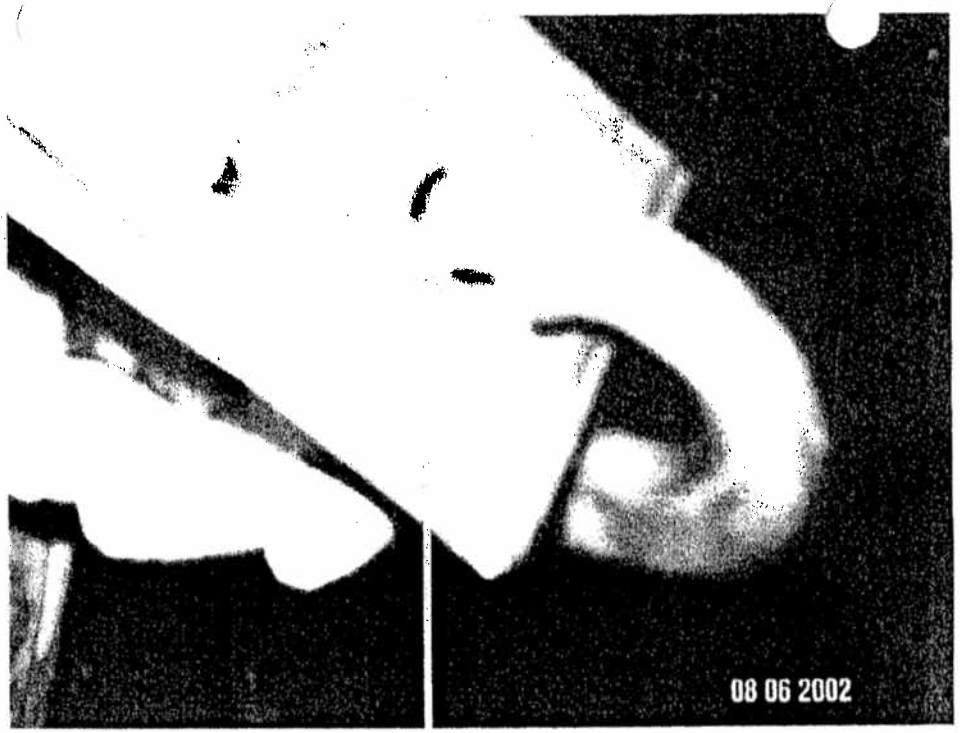








Positive latch and lanyard removed from injured



Latch incompatible with roof brackets